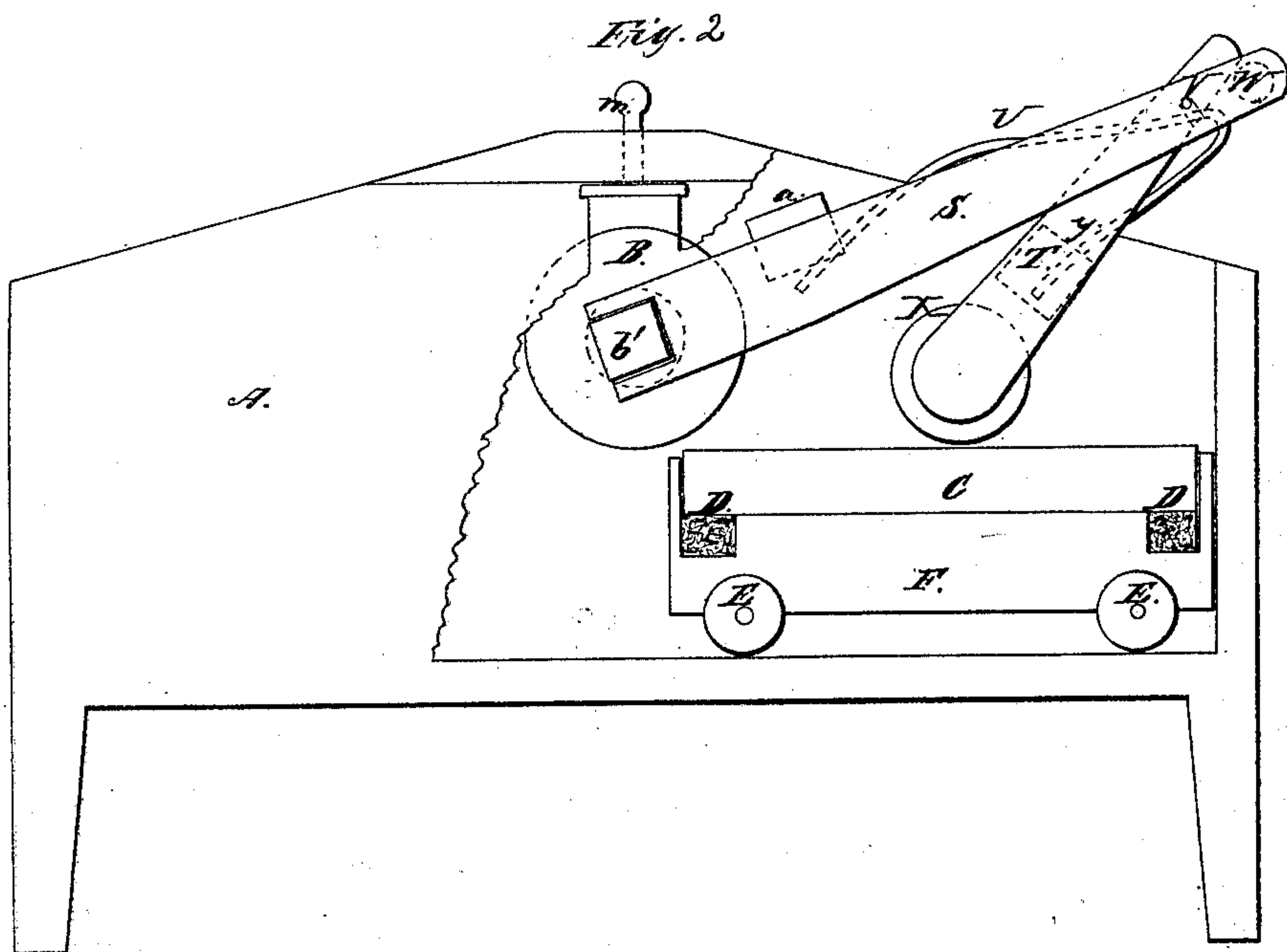
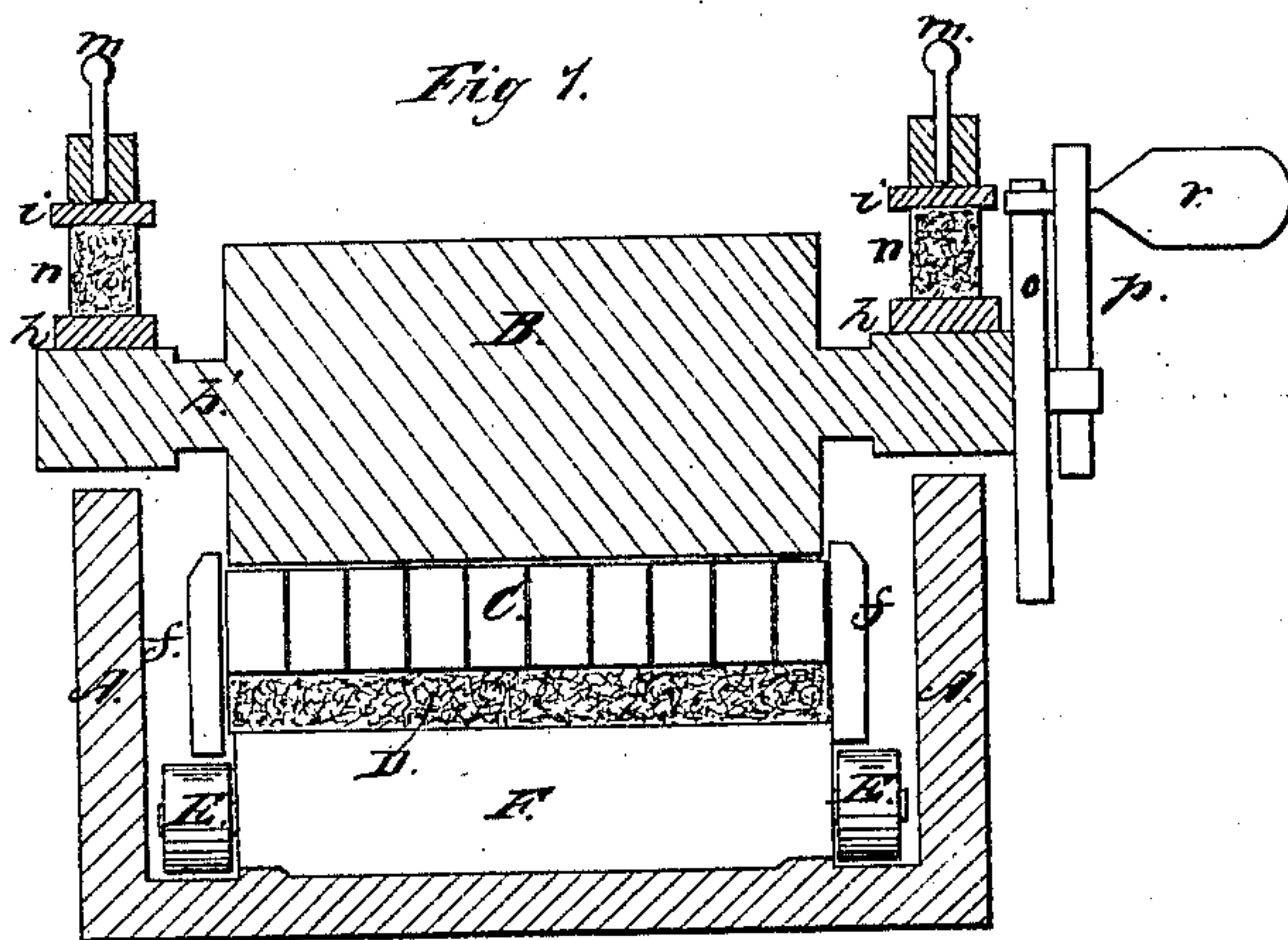


D. T. Ward,

Washing Machine,

N^o 57,601.

Patented Aug. 28, 1866.



Witnesses
Frank B. Morrison
Lee Buckle

Inventor:
Barton Pickering
for Daniel T. Ward.

UNITED STATES PATENT OFFICE.

DANIEL T. WARD, OF CARDINGTON, OHIO.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 57,601, dated August 28, 1866.

To all whom it may concern:

Be it known that I, DANIEL T. WARD, of Cardington, in the county of Morrow, in the State of Ohio, have invented a new and Improved Mode of Constructing Washing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters refer to like parts on the different figures.

The nature of my invention consists in constructing a wash-board with a series of rails supported in a frame and resting on springs, the clothing passing between the wash-board thus constructed and the roller, the wash-board either moving under the roller or a roller made to move over the wash-board, which remains stationary.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 represents a transverse section of the washing-machine. Fig. 2 represents a side elevation of the extra roller as it is connected to the roller and wash-board.

A A represent a quadrangular vessel, with an orifice on either side for the reception of the roller B, and on the axles of this roller are boxings *h h*. On these are springs *n n*, of rubber or other material, and on these springs are plates *i i*, on which the screws *m m* rest, these screws passing through the cap-pieces which cover the orifices in the sides of the vessel, and by which the springs are compressed.

The wheel *o* is attached to the roller outside of the vessel, and has a series of notches or holes near its periphery, for the reception of the handle *r*. External to this wheel is attached a crank, which moves loosely about its axis, and through this crank the handle *r* passes into the wheel *o*, for the purpose of moving the roller.

One end of the wash-board is represented. The front of the frame *f f* is removed to show the end of the rails *C* and the springs *D*, upon which the rails rest. A continuous piece of rubber may be used, as represented, or a separate piece for each rail. Springs of other material may be substituted.

The frame is supported by wheels *E E*, which

rest on the bottom of the vessel, where a track is made to give direction to the wheels.

Operation: With a sufficient quantity of suds in the vessel the articles to be washed are placed on the wash-board; then by moving the handle to and fro the board moves under the roller, the series of rails pressing the articles being washed firmly against the roller, and thereby making the washing uniform, however variable the thicknesses may be, as each rail acts independently.

At Fig. 2 is represented the roller *x* connected to the arms *T*, which arms are stayed by a cross-piece, *y*, and have a notch by which the arm is attached to the rod *v*. The arms *S* are connected by the cross-pieces *a* and *u*, and the ends of which pass over the square of the roller *b'* when used.

A spring, *u*, is fastened to the stay *y* and passes beneath the cross-piece *a*. The use of this spring is to press the roller against the wash-board.

A covering of rubber may be used on both the rollers *B* and *x*.

Operation with the roller *x*: The wash-board is moved to one end, where it is free from the roller *B*. The articles to be washed are placed on the board, and the arms are raised and depressed, the roller passing over the articles.

The roller *B* may be divided, only using a part of the periphery. During the process of washing other articles than those on the wash-board may be undergoing the process at the ends of the vessel by being pressed against the ends of the vessel.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The wash-board *F*, constructed and arranged, with reference to the vessel *A*, substantially as described, and for the purposes specified.

2. The combination of the wash-board *F* and the roller *B*, substantially as and for the purpose described.

3. The arms *S* and *T*, roller *x*, and spring *u*, when arranged in connection with the wash-board *F* and roller *B*, substantially as and for the purpose specified.

DANIEL T. WARD.

Witnesses:

JAMES OGAN,
WILLIAM PATTON.